Claim 4. (Twice amended.) A solid-electrolyte battery comprising:

an elongated positive electrode;

a positive electrode terminal welded to said positive electrode;

an elongated negative electrode disposed opposite to said positive electrode;

a negative electrode terminal welded to said negative electrode; and

a solid-electrolyte layer for each of said positive electrode and said negative electrode, wherein

said solid-eletrolyte layers for said positive electrode and said negative electrode are laminated such that they face each other and are wound in the lengthwise direction,

said solid-electrolyte layers for said positive electrode and said negative electrode are integrated with each other so as to be formed into one continuous seamless layer, and

said positive electrode, said negative electrode and said solid-electrolyte layer are packaged in a packaging film.

Claim 5. (Once amended.) A solid-electrolyte battery according to claim 4, wherein said solid-electrolyte layer contains swelling solvent and is gelled.

Claim 7. (Twice amended.) A method of manufacturing a solid-electrolyte battery comprising:

forming a first solid-electrolyte layer on a positive electrode;

forming a second solid-electrolyte layer on a negative electrode;

laminating said positive electrode having said first solid-electrolyte layer formed thereon and said negative electrode having said second solid-electrolyte layer formed thereon such that they face each other, and winding said positive electrode and said negative electrode to form wound electrodes; and

subjecting said wound electrodes to heat treatment so that said first solid-electrolyte layer formed on said positive electrode and said second solid-electrolyte layer formed on said negative electrode are integrated with each other into one continuous seamless layer.